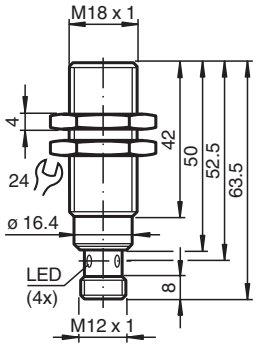
Inductive sensor

NMB10-18GH50-E2-V1

- 10 mm flush
- Active surface metal
- One-piece housing with stainless steel (V4A; 1.4435)

Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	10 mm
Installation		flush in mild steel
Output polarity		DC
Assured operating distance	s_a	0 ... 8.1 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.25
Reduction factor r_{304}		0.5 (0.9 of material thickness 2 mm)
Reduction factor r_{St37}		1
Output type		3-wire
Nominal ratings		
Installation conditions		
A		0 mm
B		16 mm
C		30 mm

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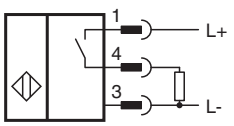
Technical Data

F		60 mm
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 300 Hz
Hysteresis	H	3 ... 15 typ. 5 %
Reverse polarity protection		yes
Short-circuit protection		yes
Voltage drop	U_d	≤ 2 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 0.1 mA
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 40 ms
Switching state indicator		LED, yellow
Limit data		
Operating pressure statically		60 bar (870.2 psi) max.
Functional safety related parameters		
$MTTF_d$		655 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		Stainless steel 1.4435 / AISI 316L
Sensing face		Stainless steel 1.4435 / AISI 316L
Degree of protection		IP68 / IP69K
Mass		24 g
Dimensions		
Length		63.5 mm
Diameter		18 mm
General information		
Assembly dimensions		x: 18 mm y: ≥ 4 mm

Connection



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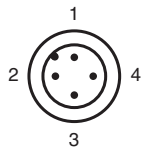
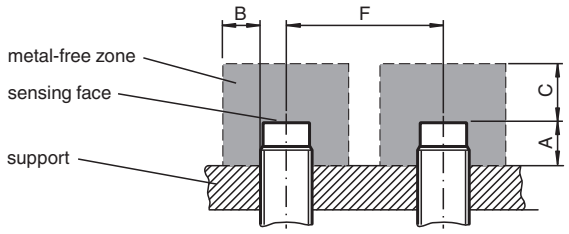
Connection Assignment



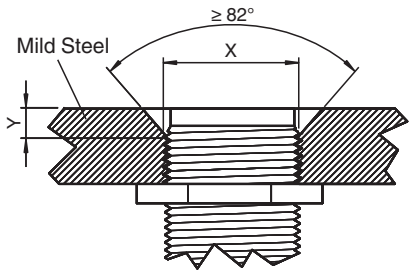
Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Installation



Mounting



Sensor face is flush with mounting surface.

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